

KENWOOD

CONNECTED NAVIGATION SYSTEM

DNN990HD

DNN770HD

GPS NAVIGATION INSTRUCTION MANUAL

JVCKENWOOD Corporation

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Icons Used in This Manual

Important precautions are described to prevent injuries and potentially dangerous situations.



Special instructions, supplementary explanations, limitations, and reference pages are described.

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Getting Started

The first time you use your Kenwood Navigation System, you need to set up your system. The Help menu provides additional information.

⚠ WARNING

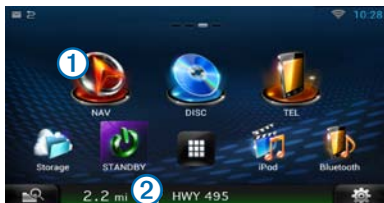
See "Safety Precautions and Important Information" in the *Quick Start Guide* for product warnings and other important information.



- The screenshots shown in this manual may not exactly match the screens on your navigation system. The images used in this manual are intended for reference only.

Using the Navigation System

For complete audio system information, see the other Kenwood system manuals.



- Select ① to access the navigation system.
- When navigating, ② displays Kenwood audio. When using audio, this displays navigation information.

Help When You Need It



Select Apps > Help to view information about using the device.

Searching Help Topics


Select Apps > Help > .

Status Bar Icons

The status bar is located at the top of the main menu. The status bar icons display information about features on the device. You can select some icons to change settings or view additional information.

	GPS signal status.
	Current time.

Satellite Signals








After your vehicle is turned on, the navigation system begins acquiring satellite signals. The system may need a clear view of the sky to acquire satellite signals. When at least one of the  bars is green, your system has acquired satellite signals.

Viewing GPS Satellite Signals

For more information about GPS, go to www.garmin.com/aboutGPS.

Select .

Using the On-Screen Buttons







- Select  to return to the main menu.
- Hold  to quickly return to the main menu.
- Select  or  to see more choices.
- Hold  or  to scroll faster.
- Select  to see a menu of options for the current screen.

Using the On-Screen Keyboard

See Language Settings to change the keyboard layout ([page 32](#)).

When an on-screen keyboard appears, select a letter or a number to enter it.




- Select  to add a space.
- Select  to delete a character.
- Select  to erase the entire entry.
- Select  to select the keyboard language mode.
- Select  to enter special characters, such as punctuation marks.
- Select  to change character capitalization.

Adding a Shortcut

You can add shortcuts to the Where To? menu. A shortcut can point to a location, a category, or a search tool. The Where To? menu can contain up to 36 shortcut icons.

- 1 Select **Where To? > Add Shortcut**.
- 2 Select an item.

Removing a Shortcut

- 1 Select **Where To >  > Remove Shortcut(s)**.
- 2 Select the shortcut to remove.
- 3 Select the shortcut again to confirm.

Finding Locations

The navigation system offers many methods for finding locations. The detailed maps loaded in your navigation system contain locations, such as restaurants, hotels, and auto services. You can use categories to browse for nearby businesses and attractions.

Finding a Location by Category

- 1 Select Where To?.
- 2 Select a category, or select Categories.
- 3 If necessary, select a subcategory.
- 4 Select a location.

Searching Within a Category

To narrow your search results, you can search within some categories.

- 1 Select Where To?.
- 2 Select a category, or select Categories.
- 3 If necessary, select a subcategory.
- 4 If necessary, enter all or part of the name in the search bar (page 12).

Finding a Location Using the Search Bar

You can use the search bar to search for locations by entering a category, brand name, address, or city name.

- 1 Select Where To?.
- 2 Select the search bar ①.




- 3 Enter a search term.

Suggested search terms appear below the search bar as you type.

- 4 Select an option:

- To search for a type of business, enter a category name, such as “movie theaters.”
- To search for a business by name, enter all or part of the name.
- To search for an address near you, enter the street number and street name.
- To search for an address in another city, enter the street number, street name, city, and state.
- To search for a city, enter the city and state.
- To search for coordinates, enter latitude and longitude coordinates.

- 5 Select an option:

- To search using a suggested search term, select the term.
- To search using the text you entered, select .

- 6 If necessary, select a location.

Changing the Search Area

By default, your device finds locations closest to your current location. You can find a location near another city or location.

- 1 Select Where To? > Searching Near.


- 2 Select an option.

- 3 If necessary, select a location.

Finding Fuel Stations and Prices

Before you can use this feature, you must subscribe to the Fuel Price service, and your device must be connected via Wi-Fi to access connected services. This feature is not available in all areas.

You can find nearby fuel stations and compare fuel prices.

- 1 **Select Where To? > Categories > Fuel Prices.**
- 2 **If necessary, select  > Fuel Type, select a fuel type, and select Save.**
- 3 **Select a fuel station.**

Finding an Address




• The order of the steps may change depending on the map data loaded on your device.

- 1 **Select Where To? > Address.**
- 2 **Enter the address number, and select Done.**
- 3 **Enter the street name, and select Next.**
- 4 **If necessary, select Searching In to change the city, state, or province.**
- 5 **If necessary, select the city, the state, or the province.**
- 6 **If necessary, select the address.**

Finding a City

Before you can find a city, you must add a shortcut to the cities search tool ([page 11](#)).

- 1 **Select Where To? > Cities.**
- 2 **Select Enter Search.**
- 3 **Enter a city name, and select .**
- 4 **Select a city.**

Finding an Intersection

Before you can find an intersection, you must add a shortcut to the intersection search tool ([page 11](#)).


- 1 **Select Where To? > Intersections.**
- 2 **Select a state or province.**

If necessary, select **State or Country** to change the country, state, or province.
- 3 **Enter the first street name, and select Next.**
- 4 **If necessary, select the street.**
- 5 **Enter the second street name, and select Next.**
- 6 **If necessary, select the street.**
- 7 **If necessary, select the intersection.**

Finding a Location Using Coordinates


Before you can find a location using coordinates, you must add a shortcut to the coordinates search tool (page 11).

You can find a location using latitude and longitude coordinates. This can be helpful when geocaching.

- 1 Select Where To? > Coordinates.
- 2 If necessary, select  > Format, select the correct coordinate format for the type of map you are using, and select Save.
- 3 Select the latitude coordinate.
- 4 Enter the new coordinate, and select Done.
- 5 Select the longitude coordinate.
- 6 Enter the new coordinate, and select Done.
- 7 Select View on Map.

Finding a Location by Browsing the Map

Before you can find places included in the map data, such as restaurants, hospitals, and fuel stations, you must enable the map layer for places along the road (page 22).


- 1 Select View Map.
- 2 Drag and zoom the map to display the area to search.
- 3 If necessary, select , and select a category icon to view only a specific category of places.

Location markers  (or a blue dot) appear on the map.

- 4 Select an option:
 - Select a location marker.
 - Select a point, such as a street, intersection, or address location.
- 5 If necessary, select the location description to view additional information.

Finding a Location Using Quick Search

After you have performed a search for a point of interest, certain categories may display a Quick Search list that displays the last four destinations you selected.


- 1 Select Where To?.
- 2 Select a category, or select Categories.
- 3 If applicable, select a destination from the Quick Search list .



- 4 If necessary, select the appropriate destination.

Saving a Home Location

You can set your home location for the location you return to most often.

- 1 Select Where To? >  > Set Home Location.
- 2 Select Enter My Address, Use My Current Location, or Choose from Recently Found.

The location is saved as “Home” in the Saved menu.

Going Home

Select Where To? > Go Home.

Editing Your Home Location Information

1 Select Where To? > Saved > Home.

2 Select  >  > Edit.

3 Enter your changes.

4 Select Done.


Finding Recently Found Places

Your device stores the last 50 locations you have found.

1 Select Where To? > Recent.

2 Select a location.

Clearing the List of Recently Found Places

Select Where To? > Recent >  > Clear > Yes.

Finding Parking

1 Select Where To? > Categories > Parking.

2 Select a parking location.

Setting a Simulated Location

If you are not receiving satellite signals, you can use the GPS to set a simulated location.

1 Select Settings > Navigation.

2 Select GPS Simulator.

3 From the main menu, select View Map.

4 Select an area on the map.

The address of the location appears at the bottom of the screen.

5 Select the location description.

6 Select Set Location.

Saving a Location

1 Search for a location ([page 12](#)).

2 From the search results, select a location.

3 Select .

4 Select  > Save.

5 If necessary, enter a name, and select OK.

Saving Your Current Location

1 From the map, select the vehicle icon.

2 Select Save.



3 Enter a name, and select Done.

4 Select OK.

Starting a Route to a Saved Location

- 1 Select **Where To? > Saved**.
- 2 If necessary, select a category, or select **All Saved Places**.
- 3 Select a location.
- 4 Select **Go!**.

Editing a Saved Location



- 1 Select **Where To? > Saved**.
- 2 If necessary, select a category.
- 3 Select a location.
- 4 Select .
- 5 Select  **> Edit**.
- 6 Select an option:
 - Select **Name**.
 - Select **Phone Number**.
 - To assign categories to the Favorite, select **Categories**.
 - To change the symbol used to mark the Favorite on a map, select **Change Map Symbol**.
- 7 Edit the information.
- 8 Select **Done**.

Assigning Categories to a Saved Location

You can add custom categories to organize your saved locations.




- Categories appear in the saved locations menu after you have saved more than 12 locations.

- 1 Select **Where To? > Saved**.
- 2 Select a location.
- 3 Select .
- 4 Select  **> Edit > Categories**.
- 5 Enter one or more category names, separated by commas.
- 6 If necessary, select a suggested category.
- 7 Select **Done**.

Deleting a Saved Location



- Deleted locations cannot be recovered.

- 1 Select **Where To? > Saved**.
- 2 Select  **> Delete Saved Places**.
- 3 Select the box next to the saved locations to delete, and select **Delete**.

Voice Command

Voice Command allows you to use your device by saying words and commands. The Voice Command menu provides voice prompts and a list of available commands (DNN990HD).



- Voice Command is not available for all languages and regions, and is only available on the DNN990HD.

Voice Command Tips

- Speak in a normal voice directed at the device.
- Reduce background noise, such as voices or the radio, to increase the accuracy of the voice recognition.
- Speak commands as they appear on the screen.
- Respond to voice prompts from the device as needed.
- Increase the length of your wakeup phrase to reduce the chance of accidental Voice Command activation.
- Listen for two tones to confirm when the device enters and exits Voice Command mode.

Starting a Route Using Voice Command

You can say the names of popular, well-known locations.

1 Press the Voice Command button.

2 Say Find Place.



3 Listen for the voice prompt, and speak the name of the location.

A list of locations appears.



4 Say the line number.



5 Say Navigate.

Finding an Address

1 Press Voice Command button.

2 Say Find Address.

3 Speak the entire address.

Navigation

You can create, customize, and edit your routes.

Starting a Route

- 1 Search for a location ([page 12](#)).
- 2 Select a location.
- 3 Select Go!.
- 4 If necessary, select a route.

Previewing Multiple Routes

- 1 Search for a location ([page 12](#)).
- 2 From the search results, select a location.
- 3 Select Routes.
- 4 Use the on-screen buttons to select a route.
- 5 Select Go!.

Following a Route

The route is marked with a magenta line. A checkered flag marks your destination.

As you travel, the device guides you to the destination with voice prompts, arrows on the map, and directions at the top of the map. If you depart from the original route, the device recalculates the route and provides new directions.



Using the Navigation Map

- 1 From the main menu, select View Map.
- 2 If the zoom controls are hidden, select the map to display the zoom controls.
- 3 Select the map to switch to browsing mode.

Map buttons appear.


- 4 Select an option:
 - To zoom in or out, select or .
 - To rotate the map view, select .
 - To switch between North Up and 3-D views, select .
 - To add or remove map layers, select .
 - To view specific location categories, select and select a category icon.
 - To center the map on your current location, select .
 - To view shortcuts for map and navigation features, select .

Using Multi-touch Controls

You can use multi-touch controls to change the map view while using the navigation map.

- Pinch two fingers together on the screen to zoom out.
- Spread two fingers on the screen to zoom in.

Adding a Point to a Route

- 1 While navigating a route, select  to return to the main menu.
- 2 Select Where To?.
- 3 Search for the location (page 12)
- 4 Select Go!.
- 5 Select Add to Active Route.

Taking a Detour

While navigating a route, you can use detours to avoid obstacles ahead of you, such as construction zones.



- If the route you are currently navigating is the only reasonable option, your device might not calculate a detour.

From the map, select  > Detour.

Stopping the Route




From the map, select .

Updating Speed Limits

NOTICE

The speed limit icon feature is for information only and does not replace the driver's responsibility to abide by all posted speed limit signs and to use safe driving judgment at all times. Garmin and JVC KENWOOD will not be responsible for any traffic fines or citations that you may receive for failing to follow all applicable traffic laws and signs

An icon displaying the current speed limit may appear as you travel on major roadways.

- 1 From the map, select  > Set Speed Limit.
- 2 Select  and  to set the speed limit.

Using Suggested Routes

Before you can use this feature, you must save at least one location and enable the travel history feature (page 15).

Using the myTrends™ feature, your device predicts your destination based on your travel history, the day of the week, and the time of day. After you have driven to a saved location several times, the location may appear in the navigation bar on the map, along with the estimated time of travel, and traffic information.

Select the navigation bar to view a suggested route to the location.





Using Exit Services




- You must be on a major highway or road to use Exit Services.

While navigating a route, you can find gas, food, lodging, and restrooms near upcoming exits.



Services are listed under tabs by category.

	Gas
	Food
	Lodging
	Restrooms

Finding Exit Services




- 1 From the map, select  > Exit Services.
- 2 Use the arrows to select an upcoming exit.
- 3 Select an exit service tab.
- 4 Select a point of interest.

Navigating to an Exit

- 1 From the map, select  > Exit Services > .
- 2 Select an exit service.
- 3 Select Go!.

Using Find Ahead

When upcoming exits do not have needed services, you can search farther ahead on your route.

- 1 While navigating a route, from the map, select  > Exit Services.
- 2 Select an exit service tab that does not have an upcoming service match.
- 3 Select Find Ahead.
- 4 Select  >  to see more exits.
- 5 Select a service.
- 6 Select Go!

Avoiding Road Features

- 1 Select Settings > Navigation > Avoidances.
- 2 Select the road features to avoid on your routes, and select Save.

Adding a Custom Avoidance Area

Custom avoidances allow you to avoid specific areas and sections of road. You can enable and disable custom avoidances as needed.

- 1 Select Settings > Navigation > Custom Avoidances.
- 2 If necessary, select Add Avoidance.
- 3 Select Add Avoid Area.
- 4 Select the upper-left corner of the area to avoid, and select Next.
- 5 Select the lower-right corner of the area to avoid, and select Next.


The selected area is shaded on the map.
- 6 Select Done.

Avoiding a Road

- 1 Select Settings > Navigation > Custom Avoidances.
- 2 Select Add Avoid Road.
- 3 Select the starting point of the section of road to avoid, and select Next.
- 4 Select the ending point of the road section, and select Next.
- 5 Select Done.

Disabling a Custom Avoidance



You can disable a custom avoidance without deleting it.

- 1 Select Settings > Navigation > Custom Avoidances.
- 2 Select an avoidance.
- 3 Select  > Disable.

Deleting Custom Avoidances

1 Select **Settings > Navigation > Custom Avoidances**.

2 Select an option:

- To delete all custom avoidances, select .
- To delete one custom avoidance, select the avoidance, and select  > **Delete**.

Enabling Advanced Detours

Select **Settings > Navigation > Advanced Detours**.

Taking a Detour Around Specified Areas

You can take a detour for a specified distance along your route or detour around specific roads. This is useful if you encounter construction zones, closed roads, or poor road conditions.

1 Select a destination, and select **Go!** ([page 12](#)).

2 From the map, select  > **Detour**

3 Select **Next .5mi on Route, Next 2mi on Route, Next 5mi on Route, or Detour by Road(s) on Route**.

4 If necessary, select a road to detour around.

Navigating Off Road

If you are not following roadways as you navigate, you can use Off Road mode.

1 Select **Settings > Navigation**.

2 Select **Calculation Mode > Off Road > Save**.


The route will be calculated as a straight line to the location.

The Map Pages

You can customize which data appear on the map and view upcoming turns and current location information.

Customizing the Map Layers

You can customize which data appear on the map, such as icons for points of interest and road conditions.

- 1 From the map, select .
- 2 Select Map Layers.
- 3 Select which layers you want to include on the map, and select Save.

Viewing the Trip Log

Your device keeps a trip log, which is a record of the path you have traveled.

- 1 Select Settings > Map & Vehicle > Map Layers.
- 2 Select the Trip Log check box.

Changing the Map Data Field


- 1 From the map, select the data field in the lower left-hand corner.
- 2 Select a type of data to display.
- 3 Select Save.

Changing the Map Perspective

- 1 Select Settings > Map & Vehicle > Driving Map View.
- 2 Select an option:
 - Select Track Up to display the map in two dimensions (2-D), with your direction of travel at the top.
 - Select North Up to display the map in 2-D with North at the top.
 - Select 3-D to display the map in three dimensions.

Customizing Map Buttons

You can include up to three icons on the right side of the main map.

- 1 Select Settings > Map & Vehicle > Map Buttons.
- 2 Select an icon, and select OK.
- 3 Select .
- 4 Select a different icon.

Removing Buttons from the Map

You can remove all buttons from the right side of the map.

- 1 Select Settings > Map & Vehicle > Map Buttons.
- 2 Select an icon, and touch OK.
- 3 Select Save.

Viewing a List of Turns

When you are navigating a route, you can view all of the turns and maneuvers for your entire route and the distance between turns.

- 1 Select the text bar on the top of the map.
- 2 Select a turn.



The details for the turn appear. If available, an image of the junction appears for junction on major roadways.

Viewing the Entire Route on the Map

- 1 While navigating a route, select the navigation bar at the top of the map.
- 2 Select > Map.

Viewing the Next Turn

While navigating a route, a preview of the next turn, lane change, or other maneuver appears in the upper-left corner of the map.

The preview includes the distance to the turn or maneuver and the lane in which you should be traveling, if available.

From the map, select to view the next turn on the map.



Viewing Junctions

While navigating a route, you can view the junctions on major roadways. When you approach a junction in a route, the image of that junction appears briefly, if available.

From the map, select to view the junction, if available.



Viewing Traffic Alerts

While you navigate a route, a traffic alert may appear.

Select the alert to view more information.

Viewing Trip Information

The trip information page displays your present speed and provides statistics about your trip.

From the map, select > Trip Computer.



Resetting Trip Information

1 From the map, select  > Trip Computer.

2 Select  > Reset All.

3 Select an option:

- When not navigating a route, select **Select All** to reset every data field, except the speedometer, on the page.
- Select **Reset Trip Data** to reset the information on the trip computer.
- Select **Reset Max. Speed** to reset the maximum speed.
- Select **Reset Trip B** to reset the odometer.

Viewing Current Location Information

You can use the Where Am I? page to view information about your current location. This feature is helpful if you need to tell emergency personnel your location.

From the map, select  > Where Am I?.

Finding Nearby Services


You can use the Where Am I? page to find nearby services, such as hospitals or police stations.

1 From the map, select  > Where Am I?.

2 Select a category.

Directions to Your Current Location

If you need to tell another person how to get to your current location, your device can give you a list of directions.

Select **Apps** > **Where Am I?** >  > **Directions to Me.**

Using the Apps

The Apps on your navigation system provide access to trip planning, fuel reports, and connected services.

About the Apps

The Apps on your navigation system provide access to premium connectivity like Real-time Traffic, Fuel Prices, Dynamic Parking, Real-Time Traffic Camera, Movie Times and more. The coverage of these services depends on availability in your region. For details, see other Kenwood system manuals.

About ecoRoute

The ecoRoute feature calculates your vehicle fuel economy, carbon footprint, and the fuel price of navigating to a destination, and offers tools for improving fuel efficiency.

The data provided by the ecoRoute feature is only an estimate. The data is not actually read from your vehicle. To receive more-accurate fuel reports for your specific vehicle and driving habits, calibrate the fuel economy.

Creating a Vehicle Profile

The vehicle profile provides a basis for ecoRoute to calculate your vehicle fuel economy.

- 1 **Select Apps > ecoRoute™.**
- 2 **Enter the required information, and select Next.**
- 3 **Select Done.**

Resetting Your Vehicle Profile

- 1 **Select Apps > ecoRoute™ > Vehicle Profile.**
- 2 **Select Reset.**

Calibrating Fuel Economy

Use this feature when you refuel to maintain an accurate fuel economy.

- 1 **Select Apps > ecoRoute™ > At the Pump.**
- 2 **Enter the current fuel price.**
- 3 **Enter how much fuel your vehicle has used since the last fill up.**
- 4 **Enter the distance you have traveled since the last fill up.**
- 5 **Select Next.**

Taking the ecoChallenge

The ecoChallenge helps you maximize your fuel economy by scoring your driving habits. The higher your ecoChallenge scores, the more fuel you save. The ecoChallenge collects data and calculates a score whenever you are moving.

The ecoChallenge  icon displays your current score on the map.

Select Apps > ecoRoute™ > ecoChallenge.




- To view detailed ecoChallenge scores, select the icon. The leaf color on the driving challenge icon changes depending on your performance in the challenge.

About ecoChallenge Scores


- **Overall**—a combination of the speed, acceleration, and braking score.
- **Speed**—gain points for driving at your vehicle optimal speed for conserving fuel (45–60 mph for most vehicles).
- **Acceleration**—gain points for smooth acceleration; lose points for rapid acceleration.
- **Braking**—gain points for smooth braking; lose points for hard braking.

Hiding Your ecoChallenge Score

- 1 Select **Settings > Map & Vehicle > Map Buttons**.
- 2 Select .
- 3 Select **OK**.

Resetting Your Score

You can restart your current ecoChallenge.

- 1 Select **Apps > ecoRoute > ecoChallenge**.
- 2 Select  **> Reset**.
- 3 Select **Yes**.

Viewing Your Fuel Economy

- 1 Select **Apps > ecoRoute™ > Fuel Economy**.

The graph along the bottom shows your average fuel economy for a period of driving time.

- 2 Select a section of the graph to zoom in.
- 3 Select **Reset** to clear the fuel economy data.

About the Mileage Report

A mileage report tracks the distance, the time, the average fuel economy, and the fuel cost of navigating to a destination.

A mileage report is created for every route that you drive. If you stop a route on the device, a mileage report is created for the distance you traveled.

Mileage reports are created automatically when you stop or complete routes.

Viewing a Mileage Report

You can view the 20 most-recent mileage reports.

- 1 Select **Apps > ecoRoute™ > Mileage Report**.
- 2 Select a report.

To reset all report data, select **Reset**.

Exporting a Mileage Report

- 1 Connect a USB mass storage device to your Kenwood unit.
- 2 Select **Apps > ecoRoute > Mileage Report**.
- 3 Select **Export** to export and save the reports to the USB mass storage device.

Setting Routes that Use Less Fuel

- 1 Select **Settings > Navigation > Calculation Mode**.
- 2 Select **Less Fuel**.

Planning a Trip

You can use the trip planner to create and save a trip with multiple destinations.

- 1 Select **Apps > Trip Planner**.
- 2 Select **New Trip**.
- 3 Select **Select Start Location**.
- 4 Search for a location ([page 12](#)).
- 5 Select **Select**.
- 6 To add additional locations, select **+**.
- 7 Select **Next**.
- 8 Enter a name, and select **Done**.

Editing a Trip Itinerary

- 1 Select **Apps > Trip Planner**.
- 2 Select a saved trip.
- 3 Select an option:
 - To change the arrival or departure time, select a location in the trip.
 - To record how long you will stay at a location, select a location in the trip, and select **Duration**.
 - To view the trip on the map, select **Map**.

Navigating to a Saved Trip

- 1 Select **Apps > Trip Planner**.
- 2 Select a saved trip.
- 3 Select **Go!**.
- 4 If prompted, select a route.

Editing a Saved Trip

- 1 Select **Apps > Trip Planner**.
- 2 Select a saved trip.
- 3 Select **≡**.
- 4 Select an option:
 - Select **Rename Trip**.
 - Select **Edit Destinations** to add and delete locations, or to change the order of locations.
 - Select **Delete Trip**.
 - Select **Optimize Order** to arrange the stops on your trip in the most-efficient order.

Importing Routes

Trip Planner and the KENWOOD Route Collector site can share information for up to 10 routes. You must have an active internet connection to share routes.

- 1 With an active internet connection, select Apps > Trip Planner.**
- 2 Select an option.**
 - Select Local to use a locally saved route.
 - Select Server to upload and use a route from the KENWOOD Route Collector site.

Viewing Previous Routes & Destinations

Before you can use this feature, you must enable the travel history feature ([page 32](#)).

You can view your previous routes and places you have stopped on the map.

Select Apps > Where I've Been.

Using the World Clock

- 1 Select Apps > World Clock.**
- 2 If necessary, select a city, enter a city name, and select Done.**

Viewing the World Map

Select Apps > World Clock > .

Nighttime hours appear in the shaded area of the map.

Using Dynamic Parking

Before you can use this feature, you must subscribe to the Dynamic Parking service, and your device must be connected via W-Fi to access connected services. This feature is not available in all areas.

- 1 Select Apps > Dynamic Parking.**
- 2 Select a parking location.**

About Real-Time Traffic Camera


Before you can use this feature, you must subscribe to the Real-Time Traffic Camera service, and your device must be connected via W-Fi to access connected services. This feature is not available in all areas.

Traffic cameras provide live images of traffic conditions on major roadways and intersections. You can save cameras that you want to view regularly.

- 1 Select Apps > Real-Time Traffic Camera.**
- 2 Select Touch to Add.**
- 3 Select a road or an intersection.**
- 4 Select Save.**

Using Movie Time

Before you can use this feature, you must subscribe to the Movie Time service, and your device must be connected via W-Fi to access connected services. This feature is not available in all areas.

- 1 Select Apps > Movie Times.**
- 2 Select  > Select Day.**
- 3 Select a Movie Title or Theater Name.**

Traffic Information

Using the built-in receiver, the navigation system can receive and use traffic information. When a traffic message is received, you can see the event on the map and change your route to avoid the traffic incident. Traffic information is not available on all models or in all areas.

NOTICE

Garmin and JVC KENWOOD is not responsible for the accuracy or timeliness of the traffic information.

Traffic information may not be available in all areas or countries.

Traffic Subscription Activation

You do not need to activate the subscription included with your navigation system. The subscription activates automatically after your system acquires satellite signals while receiving traffic signals from the pay service provider.

Understanding Traffic

Your navigation system can receive traffic information using the built-in traffic receiver or a subscription to INRIX Traffic Service. The traffic receiver must be in data range of a station transmitting traffic data to receive traffic information. The traffic subscription activates automatically after your navigation system acquires satellite signals while receiving traffic signals from the service provider. You can add other subscriptions at any time. For information about traffic receivers and coverage areas, go to www.garmin.com/kenwood.

Traffic Data Using INRIX Traffic Service

You can purchase a traffic subscription to receive traffic data using INRIX Traffic Service. When your navigation system is connected to INRIX and within a traffic coverage area, your system will begin displaying traffic information. Traffic data is not available in all areas or regions.

See the **KENWOOD Route Collector** site for **INRIX traffic subscription information**. Go to www.kenwood-drive.com.


About the Traffic Icon

When you are receiving traffic information, a traffic icon appears on the Map. The traffic icon changes color to indicate the severity of traffic conditions.

Color	Description	Meaning
Green	Low severity	Traffic is flowing normally.
Yellow	Medium severity	Traffic is slightly congested.
Red	High severity	Traffic is heavily congested or stopped.
Gray	No data	Traffic data has not updated.

Traffic on Your Route

When calculating your route, the navigation system examines the current traffic and automatically optimizes the route for the shortest time. If a severe traffic delay occurs on your route while you are navigating, your navigation system automatically recalculates the route.

The traffic icon  changes color to indicate the severity of traffic conditions on your route or on the road you are currently traveling.

Your navigation system may route you through a traffic delay if a better alternative route does not exist. The delay time is added into your estimated time of arrival automatically.

Viewing Traffic on Your Route

1 While navigating a route, select .

2 Select Traffic on Route.

A list of traffic events appears, organized by their location on the route.

3 Select an event.

Manually Avoiding Traffic on Your Route


1 From the map, select .

2 Select Traffic On Route.

3 If necessary, use the arrows to view other traffic delays on your route.

4 Select  > Avoid.

Taking an Alternate Route

1 While navigating an automobile route, select .

2 Select Alternate Route.

3 Select a route.

Viewing Traffic on the Map

The traffic map shows color-coded traffic flow and delays on nearby roads.

1 From the map, select .

2 Select Traffic Conditions.

Searching for Traffic Delays

1 From the map, select .

2 Select Traffic Conditions > .

3 Select an item in the list.

4 If there is more than one delay, use the arrows to view additional delays.

Viewing a Traffic Incident on the Map

1 From the map, select .

2 Select Traffic Conditions.

3 Select a traffic icon.

Understanding Traffic Data

The traffic legend explains the icons and colors used on the traffic map.

1 From the map, select .

2 Select Traffic Legend.

Customizing the Settings

You can customize the settings of your GPS navigation system.

Customizing the Navigation System

- 1 **Select Settings.**
- 2 **Select a setting category.**
- 3 **Select the setting to change it.**

Changing the Map Settings

Select Settings > Map & Vehicle.

- **Vehicle**—select **Change** to change the icon used to display your position on the map. Select the icon you want to use, and select **Save**.
- **Driving Map View**—select a map perspective.
- **Map Detail**—adjust the amount of detail shown on the map. More detail may cause the map to redraw slower.
- **Map theme**—changes the color of the map data.
- **Map Buttons**: Sets which icons are included on the map. Up to three icons can be included on the map.
- **Map Layers**: Sets the data that appears on the map.
- **Dashboards**: Sets the map dashboard layout.
- **myMaps**: Sets which installed maps the device uses.

Enabling Maps

- 1 **Select Settings > Map & Vehicle > myMaps.**
- 2 **Select a map.**

Changing the Navigation Settings

Select Settings > Navigation.

- **Calculation Mode**—sets route preference.
- **Avoidances**—sets road features to avoid on a route.
- **Custom Avoidances**—allows you to avoid specific roads or areas.
- **Advanced Detours**—sets the length of a detour.
- **Safe Mode**—disables all functions that require significant operator attention and could become a distraction while driving.
- **GPS Simulator**—stops the device from receiving a GPS signal, and saves battery power.

Adjusting the Display Settings

Select Settings > Display.

- **Color Mode**—select **Day** for a light background, **Night** for a dark background, or **Auto** to automatically switch between the two.

Route Preferences

Select Settings > Navigation > Calculation Mode.

The route calculation is based on road speeds and vehicle acceleration data for a given route.

- **Faster Time**—calculates routes that are faster to drive but can be longer in distance.
- **Shorter Distance**—calculates routes that are shorter in distance but can take more time to drive.
- **Less Fuel**—calculates routes that could use less fuel than other routes.
- **Off Road**—calculates a direct line from your location to your destination.

Updating the Time Settings

Select Settings > Units & Time.

- **Current Time**—select **Automatic** to update the time automatically. When Automatic is not selected, you can adjust the time in 15-minute increments.
- **Time Format**—select a 12-hour, 24-hour, or UTC time format.
- **Units**—sets the unit of measure used for distances.

Setting the Languages

Select Settings > Language & Keyboard.

- **Voice Language**—select a voice for the voice prompts.
- **Keyboard Language**—sets the language for your keyboard.
- **Keyboard Layout**—sets the keyboard layout.

Adding Security

Select Settings > Navigation > Safe Mode.

- **Safe Mode**—turn safe mode on or off. When your vehicle is moving, safe mode disables all functions that require significant operator attention and could become a distraction while driving.

Device and Privacy Settings

Select Settings > Device.


- **About** — displays the software version number, the unit ID number, and information on several other software features.



- You need this information when you update the system software or purchase additional map data ([page 33](#)).
- **Travel History** — allows the device to record information for the myTrends ([page 19](#)), Where I've Been ([page 28](#)) and Trip Log features.
- **Clear Travel History**—clears all travel history for the myTrends ([page 19](#)), Where I've Been ([page 28](#)) and Trip Log features.

Restoring Settings

You can restore a category of settings or all settings to the factory default values.

- 1 **Select Settings.**
- 2 **If necessary, select a settings category.**
- 3 **Select  > Restore.**

Appendix

This appendix provides additional information about your navigation system, such as how to update the software and map data.

Updating the Software

To update the navigation system software, you must have a USB mass storage device and an Internet connection.

- 1 Go to www.garmin.com/Kenwood.**
- 2 Find your model and select Software Updates > Download.**
- 3 Read and accept the terms of the Software License Agreement.**
- 4 Follow the instructions on the Web site to complete the installation of the software update.**

Updating the Map Data

You can purchase updated map data from Garmin or ask your Kenwood dealer or Kenwood service center for details.

- 1 Go to www.garmin.com/Kenwood.**
- 2 Select Order Map Updates for your Kenwood unit.**
- 3 Follow the Web site instructions to update your map.**

Safety Cameras

WARNING

Garmin and JVC KENWOOD are not responsible for the accuracy of, or the consequences of using, a safety camera database.

Safety camera information is available in some locations. Go to <http://my.garmin.com> for availability. For these locations, the navigation system includes the locations of hundreds of safety cameras. Your navigation system alerts you when you are approaching a safety camera and can warn you if you are driving too fast. The data is updated at least weekly, so you always have access to the most up-to-date information.

You can purchase a new region or extend an existing subscription at any time. Each region that you purchase has an expiration date.

Custom POIs (Points of Interest)

You can manually load custom points of interest (POI) databases, available from various companies on the Internet. Some custom POI databases contain alert information for points such as safety cameras and school zones. The navigation system can notify you when you approach one of these points. You are responsible for ensuring that your use of safety camera information is lawful in your area.

WARNING

Garmin and JVC KENWOOD are not responsible for the consequences of using custom POI databases, or for the accuracy of custom POI databases.

After downloading your POI database, use the Garmin POI Loader to install the POIs onto a USB mass storage device. Use the USB mass storage device to load the POIs. The POI Loader is available at www.garmin.com/products/poiloader. Refer to the POI Loader Help file for more information; click **Help** to open the Help file.



- Each time you load custom POIs to the navigation system, any other custom POIs already saved in the system will be overwritten.

Finding Custom POIs

- 1 **Select Where To? > Categories > Custom POIs.**
- 2 **Select a category.**

For the latest free software updates (excluding map data) throughout the life of your Garmin products, visit the Garmin Web site at www.garmin.com/Kenwood.



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